Classic 250/350

USER MANUAL

JOHANNUS

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1 SAFETY

1.1 Safety instructions

- Position the organ on a stable, horizontal surface.
- Connect the organ to a grounded power socket.
- Turn off the organ when it is not in use.
- Do not place the organ in a damp area.
- Do not expose the organ to liquids.
- Follow the instructions and precautionary measures in this user manual.
- Keep this user manual with the organ.
- The organ may only be opened by a technician authorized by Johannus Orgelbouw B.V. The organ contains static-sensitive components. The warranty is void if the organ is opened by a non-authorized person.

1.2 Symbols on the organ

Warning

Warning for electric shock

Warning for static-sensitive components

1.3 Symbols in this manual

Warning or important information

Note

1.4 Transport and storage

Pay attention to the following during transport and storage:

1. Remove the music desk and the pedal board from the organ.
2. Relative humidity within the storage area: 40 to 60%.

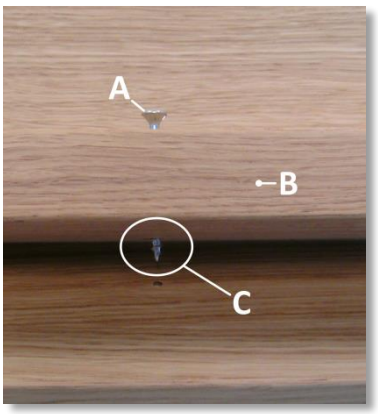
2 INSTALLATION

2.1 Installation organ

Shown model: Classic 250

1. Position the organ on a stable, horizontal surface.
2. Lean the organ slightly backward.
3. Slide the pedal board (D) against the organ.
4. Set the organ upright.
5. Install the music desk (A) on top of the organ. See §2.2 Installation music desk.
6. Place the organ bench (C) over the pedal board (D).
7. Make sure the voltage of the organ matches the voltage of the main. See the serial plate (B).
8. Connect the organ to a grounded power socket.

2.2 Installation music desk

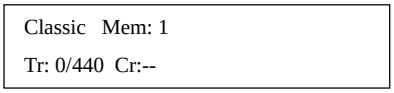


1. Turn the supplied screws (A)countersunk into the music desk slat(B) by hand till the screw sticks out 2 mm (C).
2. Place the music desk in the right position, with the screw points into the predrilled holes (D).
3. Firmly tighten the screws with a screwdriver until the music desk is securely fastened.

The use of an electric screw driver is not recommended.

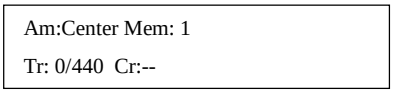
2.3 Switch on

Switch on the organ with the on/off piston at the right, next to the manuals. Wait several seconds. Starting the control functions and the settings will take some time.



Main screen Classic 250/350 with ASR-12™

The lights of the 0 piston and the as standard set functions lit up. The settings appear on the display.



Main screen Classic 250/350 with optional LIVEreverb™

3 DESCRIPTION OF THE ORGAN

3.1 Overview of the components

3.1.1 Classic 250

Shown model: Classic 250, standard version

A Music desk

B Loudspeakers

C Organ bench

D Swell pedal

E Crescendo pedal

F Pedal board

G Surround speakers

3.1.2 Classic 350

Shown model: Classic 350, Creamy White

A Music desk

B Loudspeakers

C Organ bench

D Swell pedal

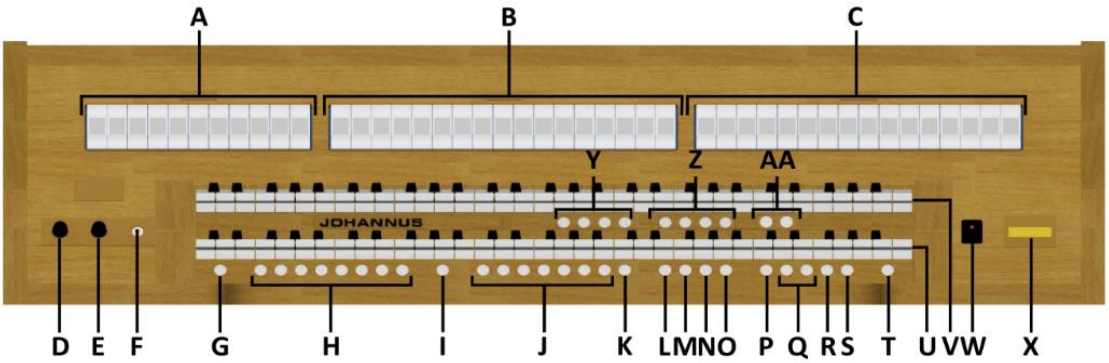
E Crescendo pedal

F Pedal board

G Surround speakers

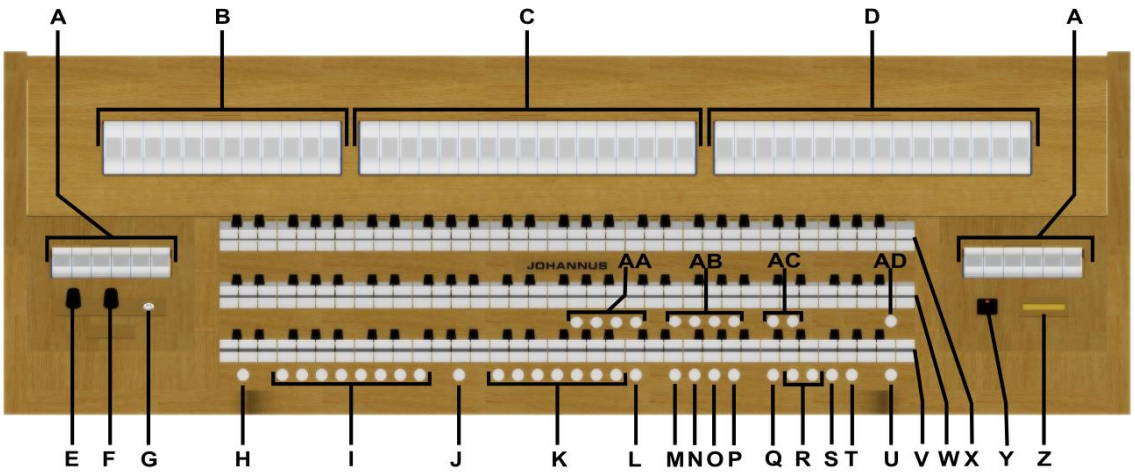
3.2 Overview of controls

3.2.1 Classic 250



A Pedal stops
B Great stops
C Swell stops
D Volume control organ
E Volume control cathedral
F Phones connection
G SET
H Capture memory locations
I CH: Chorus
J Pre-programmed memory locations
K RO: Reeds Off
L S/S : All swells to Swell
M CR: Crescendo
N MB: Manual Bass
O CF: Cantus Firmus
P TRANS.: Transposer
Q - and + pistons
R ENTER
S MENU
T 0: Recall / Cancel
U Manual Great
V Manual Swell
W On/Off piston
X Display
Y Four solo and orchestral voices
Z Intonation styles
AA Intonation variations

3.2.2 Classic 350



A Pedal stops
B Choir stops
C Great stops
D Swell stops
E Volume control Organ
F Volume control Cathedral
G Phones connection
H SET
I Capture memory locations
J CH: Chorus
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Q TRANS.: Transposer
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U 0: Recall / Cancel
V Manual Choir
W Manual Great
X Manual Swell
Y On/Off piston
Z Display
AA Four solo and orchestral voices
AB Intonation styles
AC Intonation variations
AD KT: Keyboard Transfer

3.3 Connect and switch on the peripherals

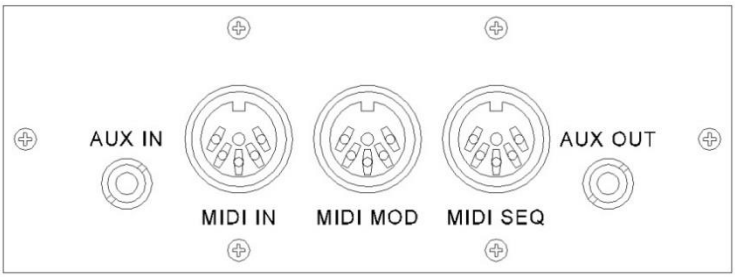
You can connect peripherals (for example, a MIDI device) to the organ.

Follow the instructions provided in the documentation for the peripheral.

1. Switch off the organ and the peripheral.
2. Connect the peripheral to the organ.
3. Switch on the peripheral.
4. Switch on the organ.

3.4 External connections

The external connections are on the left under the console.



AUX IN: A stereo audio input for playing the sound of an external device through the amplifiers of the organ. For example, an expander connected to the organ through the MIDI MOD can be played through the instrument's loudspeakers.

MIDI IN: An input for receiving MIDI codes from other devices.

MIDI MOD: A programmable MIDI output for connecting a sound module or expander, for example.

MIDI SEQ: A non-programmable MIDI output for connecting a Johannus MIDI Sequencer+ or PC (with the optional Johannus INTONAT program), for example.

AUX OUT: A stereo audio output for connecting an external device (amplifier or recording device, for example).

PHONES: The phones connection is on the left next to the manuals.
This connection for a (stereo) headphone is suited for a headphone with an impedance of 30 Ω or more (see headphone specifications).

When the headphone is used, the loudspeakers of the organ are switched off automatically.

4 OPERATION

4.1 Volume controls

Organ: The volume of the organ can be adjusted with the ORGAN volume control.

Cathedral: The reverb volume can be adjusted smoothly with the CATHEDRAL volume control.

4.2 Expression pedals

In the standard version the organ has two expression pedals. One is configured as a swell pedal for the Swell, the other is configured as a crescendo pedal. With use of the Johannus Menu, the function of the expression pedals can be changed, see § 5.6 Expression Pedals.

Using an expression pedal which is set as a swell pedal will, next to the volume, also change the timbre of the stops. By this the effect of the swell box shutters of a pipe organ is simulated.

Extra expression pedal (optional)
If the organ is equipped with the optional Deluxe Package an extra expression pedal is available. This expression pedal is standardly configured as swell pedal for the Great and Pedal *(Classic 250)* or Choir, Great and Pedal *(Classici 350)*. This function can be changed using the Johannus Menu, see § 5.6 Expression Pedals.

4.3 Cathedral

4.3.1 ASR-12 ™

In the standard version of the Classic 250 and 350 the Adaptive Surround Reverb ASR-12 ™ system is available. The ASR-12 ™ reverb system produces a digital acoustic effect. This effect provides a spatial reproduction of the organ sound that can be adjusted continuously.

Use the volume control CATHEDRAL to adjust the reverb volume.

The reverb length can be set using the Johannus Menu. See § 5.12 Reverb Settings, sub a. The length can be set for each intonation style and variation.
The following twelve reverb types can be selected for each intonation style and variation in the Johannus Menu, see § 5.12, sub a:

- Abbey Church
- Basilica
- City Cathedral
- Concert Hall
- Hill Church
- Marble Church
- Marble Room
- Music Room
- Palace Hall
- Royal Auditorium
- Town Church
- Village Chapel

4.3.2 LIVEreverb™ *(optional)*

The Classic 250 and 350 can be equipped with the optional LIVE reverb™ reverb system. The LIVEreverb™ system produces a natural reverb using recordings of the acoustics of existing churches and concert halls.

Use the volume control CATHEDRAL to adjust the reverb volume.

The LIVEreverb™ system offers the reverb of twelve different churches and concert halls. In order of length these churches and concert halls are:

- St. Salviuskerk, Limbricht 2,5s
- Zuidervermaning, Westzaan 2,5s
- Feike Asmazaal, Johannus Ede 3,5s
- Frogner Kirke, Oslo 3,5s
- St. Jozef, Utrecht 4,5s
- Plantagekerk, Zwolle 4,5s
- Oude Kerk, Ede 5s
- Oude Kerk, Amsterdam 5,5s
- St. Peter, Bonn-Vilich 6s
- Kruisverheffingskerk, Raalte 6,5s
- Bovenkerk, Kampen 7,5s
- Église Notre Dame, La Grand-Combe 8s

These churches and concert halls can be chosen using the Johannus Menu, see § 5.12 Reverb Settings, sub b.

4.4 Adaptive Ambiance System™ *(optional)*

This function is only available when the organ is equiped with the optional LIVEreverb™ reverb system.

Adaptive Ambiance System™ is a function which works with LIVEreverb™ to position the organ sound in the church. It lets you choose where to sit in the church to enjoy the sound of the organ. Just as you will search the best seat in church to hear the sound of the organ when visiting an organ concert. For some this will be in the front, to hear every single detail of the sound, for others this will be in the rear of the church, to enjoy the fusion of the reverb and the organ sound.

There are four locations to choose from:

- Location Organ Console: you are sitting at the console of the organ
- Location Front: you are sitting in front of the church
- Location Centre: you are sitting in the middle of the church
- Location Rear: you are sitting at the back of the church

Volume control Cathedral is besides adjusting the volume of the reverb also used to adjust the balance between the organ sound and the ambiance.

Adaptive Ambiance System™ can be configured by using the Johannus Menu. See § 5.1 Ambiance. The set location is to read on the display behind `Am:`.

4.5 Intonations

The organ has twelve intonations, divided in four styles and three variations per style.

The four intonation styles:
- Romantic (ROM.)
- Symphonic (SYM.)
- Baroque (BAR.)
- Historic (HIS.)

The three variations per style:
- Standard
- Solo (SOLO)
- Trio (TRIO)

Select an intonation style by pressing the ROM., SYM., BAR. or HIS. piston. Select an intonation variation by pressing the SOLO or TRIO piston.

If no variation piston is selected, Standard is selected automatically.

4.6 Stops

The stops are activated via stop switches, pre-programmed memory locations or capture memory locations.
The lamp in the stop switch lights up when the associated stop is active.

The stops are divided into the following groups:
Pedal: Activates the stops associated with the Pedal.
Choir: Activates the stops associated with the Choir. *(Classic 350 only)*
Great: Activates the stops associated with the Great.
Swell: Activates the stops associated with the Swell.

Solo and orchestral voices
The Classic 250 and 350 are standardly equipped with the following four solo and orchestral voices:
- Panflute (PANFL.)
- Trumpet (TRUMP.)
- Oboe (OBOE.)
- String ensemble (STR.)

If the organ is equipped with the optional Platinum Voice Package a number of solo and orchestral voices is added.

The solo and orchestral voices are activated by thumb pistons on the piston rail between the manuals. The lamp in the thumb piston lights up when the associated voice is active. See chapter 6 VOICE PACKAGE for more information on solo and orchestral voices.

Solo- and orchestral voices are standardly playable from a factory defined manual. This can be changed via Quick Access (§ 4.12.2 Keyboard assignment Orchestrals) and via the Johannus Menu (§ 5.10 Orchestrals).

4.7 Couplers

Manual couplers:
CHOIR – GREAT: *Classic 350 only*
Fully couples all keys of the Choir to the Great.
SWELL - GREAT:
Fully couples all keys of the Swell to the Great.
SWELL – CHOIR: *Classic 350 only*
Fully couples all keys of the Swell to the Choir.

Pedal couplers:
CHOIR – PEDAL: *Classic 350 only*
Fully couples all keys of the Choir to the Pedal.
GREAT - PEDAL:
Fully couples all keys of the Great to the Pedal.
SWELL - PEDAL:
Fully couples all keys of the Swell to the Pedal.

4.8 Accessories

Chorus (CH):
Chorus is a function for lightly detuning the organ stops to give it a broader and livelier sound. Activate the Chorus with the CH piston.

Reeds Off (RO):
Reeds Off is a function to switch off all reed stops simultaneously. As long as this piston is pressed, no reed stops can be activated. When this function is switched off, the reed stops that were on are activated again. Activate the Reeds Off with the RO piston.

All Swells to Swell (S/S)
All Swells to Swell transforms the swell pedal for the Swell to a swell pedal for the whole organ. Activate the All Swells to Swell function with the S/S piston.

If no expression pedal is configured as a swell pedal for the Swell, the S/S piston cannot be activated.

Crescendo (CR):
Crescendo is a function to activate and de-activate the Crescendo Pedal. If no expression pedal is configured as a crescendo pedal, the CR piston cannot be activated. See §4.11 Crescendo Pedal.

Manual Bass (MB):
Manual Bass couples the Pedal monophonic to the Great. Only the lowest key that is played on the Great is coupled from the Pedal to the Great.
If only the lowest key of a chord is released, the pedal key activated by the Manual Bass function is dropped until a new lowest key is played.
Activate the Manual Bass with the MB piston.

It is advisable not to use the Manual Bass while playing the pedal board to avoid double bass tones.

Cantus Firmus (CF):
Cantus firmus is Latin for 'fixed voice' or in organs 'solo voice' or 'melody coupler'.
Couples the Swell monophonic to the Great. Only the highest key that is played on the Great is coupled from the Swell to the Great.
With use of a solo registration on the Swell in this way a solo is heard while playing only on the Great.
If only the highest key of a chord is released, the key activated by the Cantus Firmus function is dropped until a new highest key is played.
Activate the Cantus Firmus with the CF piston.

It is advisable not to use the Cantus Firmus in combination with the coupler SWELL - GREAT because this overrules the solo function of the Cantus Firmus.

Transposer
The Transposer function shifts the pitch by half-tone increments (from -8 to +8). The transposer setting can be read on the display (`Tr: …`).

1. Press the TRANS. piston.
2. Use the - and + pistons to set the pitch.
3. When the transposer change needs to be saved, press the ENTER piston while the TRANS. piston is lit.

Recall / Cancel function (0):
The 0 piston cancels stops in two ways:
1. A short press on the 0 piston: Only the last change is cancelled.
2. A long press on the 0 piston: All stops are cancelled.

Keyboard Transfer (KT): *Classic 350 only*
Keyboard Transfer is a function to switch the manuals of the Choir and the Great. When Keyboard Transfer is active manual 1 is the Great manual and manual 2 is the Choir manual. Activate the Keyboard Transfer with the KT piston.

4.9 Pre-programmed memory locations

Pre-programmed memory locations are available by operating pistons PP to T and PL. These seven memory locations have factory settings (presets) appropriate for the quiet pianissimo to the loud tutti and the classic plenum.

Calling up a pre-programmed memory location:
Press a pre-programmed memory location (PP-T or PL). The active stops light up.

Programming a pre-programmed memory location:

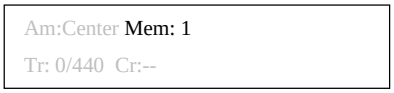
The current setting of the pre-programmed memory location will be lost.

Although it is possible to store any registration under a piston of a pre-programmed memory location it is advisable to select a registration matching the text of the piston.

1. Select the desired stops.
2. Press the SET piston. Hold the piston.
3. Press the desired pre-programmed memory location (PP-T or PL).
4. Release the SET piston.

4.10 Capture memory

Through use of the capture memory, a registration can be activated with just one piston. The capture memory consists of 75 levels.



These levels can be seen on the display (`Mem:…`). Each level has eight memory locations (pistons 1-8). The 600 capture memory locations are not pre-programmed and can be programmed by the musician.

Programming a capture memory location:

The current setting of the capture memory location will be lost.

1. Select the desired stops.
2. Use the - and + pistons to select a level (1-75) on the display.
3. Press the SET piston. Hold the piston.
4. Press the desired memory location (1-8).
5. Release the SET piston.

Calling up a capture memory location:
1. Use the - and + pistons to select the desired level (1-75) on the display.
2. Press the desired memory location (1-8). The active stops light up.

4.11 Crescendo pedal

The crescendo pedal can be used to activate 20 registrations step-by-step. These registrations start with very quiet (pianissimo) to very loud (tutti).
The default registrations of the 20 steps can be changed. See § 5.2 Crescendo.

Activating the crescendo pedal
If the crescendo pedal is not activated it is indicated on the display with `Cr:--`.

Use the CR piston to activate the crescendo pedal. The display indicates the actual step.

Crescendo pedal as additional swell pedal
The crescendo pedal can also be configured as a swell pedal. See § 5.6 Expression Pedals.

> If the crescendo pedal is set as additional swell pedal, all functions of the crescendo pedal are deactivated.

4.12 Quick Access

Quick Access is a function to quickly access a certain functions of the organ.

4.12.1 Programming mode crescendo pedal

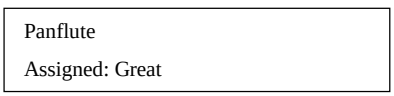
> This function is not available if no expression pedal is set as crescendo pedal.

Pressing the ENTER and CR piston simultaneously enters the programming mode of the crescendo pedal. See § 5.2 Crescendo, sub 4 for the next steps.

4.12.2 Keyboard assignment Orchestrals

Through use of Quick Access it is also possible to assign a solo- or orchestral voice directly to a manual or the pedal.

1. Press the ENTER piston simultaneously with a piston of a solo- or orchestral voice, for example Panflute.
2. The actual assignment appears on the display.
3. Press a key of the manual or the pedal on which the solo- or orchestral voice has to be assigned.
4. Now the solo- or orchestral voice is playable from the selected manual or pedal.



5 JOHANNUS MENU

In the Johannus Menu several functions of the organ can be set:

- Press the MENU piston to activate the Johannus Menu on the display.
- Navigating the menu is done with the - and + pistons.
- Confirming a choice is done with the ENTER piston.
- Cancel or step back in the menu is done with the MENU piston.

The Johannus Menu consists of the following functions:

Function	More information
Ambiance	§ 5.1
Crescendo	§ 5.2
Datadump	§ 5.3
Demo Songs	§ 5.4
Display Contrast	§ 5.5
Expr. Pedals	§ 5.6
Keyboard Config	§ 5.7
Key Volumes	§ 5.8
MIDI Config	§ 5.9
Orchestrals	§ 5.10
Reset Procedures	§ 5.11
Reverb Settings	§ 5.12
Startup Settings	§ 5.13
Temperaments	§ 5.14
Tuning	§ 5.15
Version	§ 5.16

5.1 Ambiance

The ‘Ambiance’ menu is only available if the organ is equiped with the optional LIVEreverb™ system.

Adaptive Ambiance System™ is a function which works with LIVEreverb™ to position the organ sound in the church. There are four available locations: at the console of the organ, in the front, in the center or in the rear of the church.

1. Press the MENU piston.	Johannus Menu: Ambiance
2. Use the - and + pistons to select the `Ambiance` function on the display.	Johannus Menu: Ambiance
3. Press the ENTER piston. The actual set location appears on the display.	Ambiance Location Console

4.	Use the - and + pistons to select the desired location. - `Console`: at the console of the organ - `Front`: in front of the church - `Center`: in the middle of the church - `Rear`: at the back of the church	Ambiance Location Center
5.	Press the ENTER piston to confirm and to return to the Johannus Menu.	Johannus Menu: Ambiance
6.	Press the MENU piston to exit the Johannus Menu.	Am:Center Mem: 1 Tr: 0/440 Cr: 0

5.2 Crescendo

The crescendo pedal contains 20 pre-programmed registrations. These registrations start with very quiet (pianissimo) to very loud (tutti). These pre-programmed registrations can be changed.

> Step 0 of the crescendo pedal cannot be changed.

1.	Press the MENU piston.	Johannus Menu: Crescendo
2.	Use the - and + pistons to select the `Crescendo` function on the display.	Johannus Menu: Crescendo
3.	Press the ENTER piston. The first step of the crescendo pedal appears on the display.	Crescendo Cres. step: 0
4.	Use the - and + pistons to select the step which has to be changed (for example step 5).	Crescendo Cres. step: 5
5.	Change the registration and press the ENTER piston to save the new registration in the memory of the organ.	
6.	Repeat steps 4 and 5 if more crescendo pedal steps have to be changed.	
7.	Press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

5.3 Datadump

The Datadump function sends several settings from the organ to a storage medium (the Johannus MIDI Sequencer+, for example) through the MIDI SEQ output. See § 3.4 External connections.

The settings to send are: the content of all capture memory locations and all settings which can be set via the Johannus Menu, except Key Volumes. Key Volumes settings is a part of the intonation data. These data can be received with the optional Johannus INTONAT software.

a. Sending data from the organ	
1. Press the MENU piston.	Johannus Menu: Crescendo
2. Use the - and + pistons to select the `Datadump` functions on the display.	Johannus Menu: Datadump
3. Press the ENTER piston. The `Press ENTER` text appears on the display.	Datadump Press ENTER
4. Make sure the desired storage medium is properly connected.	
5. Press the ENTER piston. When data is being sent, `Sending data...` appears on the display. Sending data will take some time.	Datadump Sending data...

Do not use the organ when the `Sending data...` text is on the display.

6. If the data dump is complete, the main menu appears on the display.	Johannus Menu: Datadump
7. Press the MENU piston to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

b. Uploading data to the organ	

Receiving a data file has no relation to the Johannus Menu and can be done on every moment the organ is switched on, except when playing a Demo Song.

Make sure to upload only data files which are recorded from the instrument concerned. Uploading a data file from another instrument may jeopardize the functioning of your instrument.

1. Make sure the storage medium, the Johannus MIDI Sequencer+ for example, with a previous recorded data file is properly connected.	
3. Start sending the data file on the sequencer. A message that a data file is being received appears on the display of the organ.	Uploading stored data
4. When the upload is completed the main screen of the display appears automatically.	Classic Mem: 1 Tr: 0/440 Cr:--

5.4 Demo Songs

The Demo Songs function plays twelve different demo songs.

1.	Press the MENU piston.	Johannus Menu: Crescendo
2.	Use the - and + pistons to select the `Demo Songs` function on the display.	Johannus Menu: Demo Songs
3.	Press the ENTER piston. The title of the first demo song appears on the display.	Demo Songs [title]
4.	Use the - and + pistons to select one of the twelve demo songs.	
5.	Press the ENTER piston to select the demo song.	[title] Play one demo
6.	Use the - and + pistons to choose whether to play only the selected demo song (`play one demo`) or all demo songs (`play all demo's`).	
7.	Press the ENTER piston to start playing the selected demo song(s). The title and composer of the demo song appears on the display.	[title] [composer] ♫

> While playing a demo song, the operating functions of the organ are disabled except for the following functions:
> a. **0 piston:** stop playing the demo song('s).
> b. **Organ volume control:** adjust the volume of the organ.
> c. **Cathedral volume control:** adjust the volume of the reverb.

8.	Press the MENU piston twice after having played the demo song(s) to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

5.5 Display Contrast

The Display Contrast function adjusts the display contrast.

1.	Press the MENU piston.	Johannus Menu: Crescendo
2.	Use the - and + pistons to select the `Display Contrast` function on the display.	Johannus Menu: Display Contrast
3.	Press the ENTER piston. The current contrast level appears on the display.	Display Contrast Level: 9
4.	Use the - and + pistons to select the desired contrast level.	

5.	Press the ENTER piston to confirm and to return to the main menu.	Johannus Menu: Display Contrast
6.	Press the MENU piston to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

5.6 Expression Pedals

The organ is equipped with PEPC™ (Programmable Expression Pedal Configuration). This function makes it possible to configure each expression pedal to one's own discretion.

We distinguish two types of expression pedals:

Swell pedal: Dynamics by increase or decrease of volume. In a pipe organ this is achieved by closing or opening the swell shutters of a swell box. See also § 4.2 Expression pedal.

Crescendo pedal: Dynamics by increase or decrease the amount of stops. See also § 4.11 Crescendo pedal.

a. An expression pedal can be configured as a swell pedal for several divisions at the same time.
b. A division can only be connected to one expression pedal at the same time.
c. An expression pedal cannot be configured as a swell pedal and a crescendo pedal at the same time.

1.	Press the MENU piston.	Johannus Menu: Crescendo
2.	Use the - and + pistons to select the `Expr. Pedals` function on the display.	Johannus Menu: Expr. Pedals
3.	Press the ENTER piston. The first expression pedal appears on the display.	Expr. Pedals Expr. Pedal 1
4.	Use the - and + pistons to select the expression pedal which has to be changed. Expression pedal 2, for example.	Expr. Pedals Expr. Pedal 2
5.	Press the ENTER piston. The first possibility for the expression pedal appears on the display. The possibilities are: - `Ch`: swell pedal for Choir *(Classic 350 only)* - `Gt/Pd`: swell pedal for Great and Pedal - `Sw`: swell pedal for Swell - `Cresc`: crescendo pedal	Expr. Pedal 2 >Ch : No
6.	Use the - and + pistons to select the desired possibility, `Sw` for example.	Expr. Pedal 2 >Sw : Yes

7.	Press the ENTER piston. The cursor jumps to the actual setting.	Expr. Pedal 2 Sw : >Yes
8.	Use the - and + to select the desired setting, `No` for example.	Expr. Pedal 2 Sw : >No
9.	Press the ENTER piston to confirm. The cursor jumps back.	Expr. Pedal 2 >Sw : No
10.	If necessary, repeat steps 6 to 9 to change other possibilities or press the MENU piston to return to the Expression Pedal menu.	Expr. Pedals Expr. Pedal 2
11.	If necessary, repeat steps 4 to 10 for another expression pedal of press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

5.7 Keyboard Config

The Keyboard Config function sets the operation of the keys.

1.	Press the MENU piston.	Johannus Menu: Crescendo
2.	Use the - and + pistons to select the `Keyboard Config` function on the display.	Johannus Menu: Keyboard Config
3.	Press the ENTER piston. The current setting of the first manual appears on the display.	>Great Automatic
4.	Use the - and + pistons to select the manual the setting of which must be changed: - `Choir` *(Classic 350 only)* - `Great` - `Swell`	
5.	Press the ENTER piston. The cursor moves to the second line of the display.	Great >Automatic
6.	Use the - and + pistons to select a setting for the operation of the keys. - `Automatic`: The manual has been set to High. When activating a programmable MIDI stop or optional solo- or orchestral voice, the manual will be set to Velocity automatically. - `High`: The keys respond when touched very lightly. - `Low`: The keys respond when pressed further. - `Velocity`: The keys are touch-sensitive.	
7.	Press the ENTER piston. The manual setting is now saved in the memory and the cursor moves back to the first line of the display.	>Great Automatic

8.	Repeat steps 4 to 7 to change the setting of another manual or press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

5.8 Key Volumes

The Key Volumes function makes it possible to adjust the key volumes of each stop.
This function consists of the following sub functions:

a. Adjust
b. Reset one stop
c. Reset ALL stops

a. Adjust

The Adjust function sets the volume per key, stop and intonation style.

> Key volumes of the (optional) solo- and orchestral voices cannot be adjusted.

1.	Switch off all stops.	
2.	Select an intonation style or variation.	
3.	Press the MENU piston.	Johannus Menu: Crescendo
4.	Use the - and + pistons to select the `Key Volumes` function on the display.	Johannus Menu: Key Volumes
5.	Press the ENTER piston. The first sub function of the Key Volumes menu appears on the display.	Key Volumes Adjust

> If you are asked to enter a code, the Key Volumes function has been secured at the request of the owner. Contact the owner or dealer to retrieve the code. Enter the code using the pistons of the capture memory locations and press the ENTER piston.
>
> Enter code:
> _ _ _ _

6.	Press the ENTER piston. The request to select a stop to adjust appears on the display.	Select a stop to adjust
7.	Activate one stop. The request to press a key appears on the display.	Key: press a key Vol: -/+
8.	Press one key on the corresponding division and hold the key. The display will now show `Key:` the key indicator and `Vol:` the volume.	Key: 3 C Vol: 83 -/+
9.	Use the - and + pistons to set the desired volume.	
10.	Press the ENTER piston to save the change. The request for confirmation appears on the display. Use the - and + pistons to select `No` or `Yes`.	Save changes? No/Yes

11. Press the ENTER piston to confirm.	Key: press a key Vol: -/+
12. Press the MENU piston to return to the Key Volume menu.	Key Volumes Adjust
13. If the changes have not been saved, the display will show `Discard changes?`. Use the - and + pistons to select `Yes` for discarding and press the ENTER piston. Go to step 17.	Discard changes? No/Yes
14. Use the - and + pistons to select `No` if the changes still has to be saved and press the ENTER piston.	Key: press a key Vol: -/+
15. Press the ENTER piston. The display requests confirmation.	Save changes? No/Yes
16. Use the - and + pistons to select `Yes`. Press the ENTER piston for confirmation. The display shows: `Don't switch off`	Don't switch off
17. Press the MENU piston three times to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

More key volumes can be changed by pressing another key or by selecting another stop.

b. Reset one stop

The Reset one stop sub function resets the key volumes for one stop in one intonation or variation to the factory setting.

1. Switch off all stops	
2. Select an intonation style or variation	
3. Press the MENU piston.	Johannus Menu: Crescendo
4. Use the - and + pistons to select the `Key Volumes` function on the display.	Johannus Menu: Key Volumes
5. Press the ENTER piston. The first sub function of the Key Volumes menu appears on the display.	Key Volumes Adjust

If you are asked to enter a code, the Key Volumes function has been secured at the request of the owner. Contact the owner or dealer to retrieve the code. Enter the code using the pistons of the capture memory locations and press the ENTER piston.

Enter code:
____

6. Use the - and + pistons to select the `Reset one stop` sub function on the display.	Key Volumes Reset one stop
7. Press the ENTER piston. The request to select a stop to reset appears on the display.	Select a stop to reset
8. Activate one stop. A request for confirmation appears on the display.	Reset this stop? No/Yes
9. Use the - and + pistons to select `No` or `Yes`.	Reset this stop? No/Yes
10. Press the ENTER piston to confirm and to return to the Key Volumes menu.	Key Volumes Reset one stop
11. Press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

c. Reset ALL stops

The Reset ALL stops function resets the key volumes of all stops in one intonation style or variation to the factory setting.

1. Select an intonation style or variation.	
2. Press the MENU piston.	Johannus Menu: Crescendo
3. Use the - and + pistons to select the `Key Volumes` function on the display.	Johannus Menu: Key Volumes
4. Press the ENTER piston. The first sub function of the Key Volumes menu appears on the display.	Key Volumes Adjust

If you are asked to enter a code, the Key Volumes function has been secured at the request of the owner. Contact the owner or dealer to retrieve the code. Enter the code using the pistons of the capture memory locations and press the ENTER piston.

Enter code:
____

5. Use the - and + pistons to select the `Reset ALL stops` sub function on the display.	Key Volumes Reset ALL stops

6.	Press the ENTER piston. A request for confirmation appears on the display.	Reset ALL stops? No/Yes
7.	Use the - and + pistons to select `No` or `Yes`.	Reset ALL stop? No/Yes
8.	Press the ENTER piston to confirm and to return to the Key Volumes menu.	Key Volumes Reset one stop
9.	Press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

5.9 MIDI Config

MIDI is a protocol for communication between the organ and other devices, such as PC, Johannus MIDI Sequencer+ or other musical instruments.
The programmable MIDI stops allow you to control any module voice through any MIDI channel (1-16).
The four parts of the programmable MIDI code are: Channel, Msb, Lsb en Voice.

1.	Press the MENU piston	Johannus Menu: Crescendo
2.	Use the - and + pistons to select the `MIDI Config` function on the display.	Johannus Menu: MIDI Config
3.	Press the ENTER piston. A question to select a MIDI stop to configure appears on the display.	Select a MIDI Stop to config
4.	Activate the MIDI stop which has to be configured (MIDI from the Swell, for example). The display shows on the first line: `Swell Channel` (the selected MIDI stop and the first part of the MIDI code) and on the second line the settings of all four parts: Channel, Msb, Lsb en Voice.	Swell Channel 2 0 0 1
5.	Use the - and + pistons to select the desired MIDI-channel.	Swell Channel 2 0 0 1
6.	Press the ENTER piston. The display shows: `Swell Msb`.	Swell Msb 2 0 0 1
7.	If needed, use the - and + pistons to select the desired Msb setting.	Swell Msb 2 0 0 1

8. Press the ENTER piston. The display shows: `Swell Lsb`.	Swell Lsb 2 0 0 1
9. If needed, use the - and + pistons to select the desired Lsb setting.	Swell Lsb 2 0 0 1
10. Press the ENTER piston. The display shows: `Swell Voice`.	Swell Voice 2 0 0 1
11. Use the - and + pistons to select the desired Voice setting.	Swell Voice 2 0 0 1
12. Press the ENTER piston. The selected configuration is now stored in memory. The first of the four parts of the programmable MIDI code appears on the display.	Swell Channel 2 0 0 1
13. Press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

5.10 Orchestrals

The Classic 250 and 350 are standardly equipped with four solo and orchestral voices. With the optional Platinum Voice Package a number of solo and orchestral voices can be added.

Solo- and orchestral voices are standardly playable from a factory defined manual. This can be changed via the Johannus Menu.

> Assigning a solo- or orchestral voice to a manual or pedal can also be done with the Quick Access function. See §4.12.2 Keyboard Assignment Orchestrals.

1. Press the MENU piston.	Johannus Menu: Crescendo
2. Use the - and + pistons to select the `Orchestrals` function on the display.	Johannus Menu: Orchestrals
3. Press the ENTER piston. The first solo- or orchestral voice appears on the display.	Orchestrals Panflute
4. Use the - and + pistons to select the solo- or orchestral voice from which the assignment has to be changed.	Orchestrals Panflute
5. Press the ENTER piston. The current assignment of the solo- or orchestral voice appears on the display.	Panflute Assigned: Great

6.	Press a key on the manual or pedal on which the solo- or orchestral voice has to be assigned. The new assignment appears on the display.	Panflute Assigned: Swell
7.	Press the MENU piston three times to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

5.11 Reset Procedures

The Reset Procedures function can be used to reset a number of settings to the factory settings.

1.	Press the MENU piston.	Johannus Menu: Crescendo
2.	Use the - and + pistons to select the `Reset Procedures` function on the display.	Johannus Menu: Reset Procedures
3.	Press the ENTER piston. The first option of the Reset Procedures appears on the display.	Reset Procedures Crescendo def.
4.	Use the - and + pistons to select the desired reset procedure: - `Crescendo def.`: Resets the factory settings of the 20 steps of the crescendo pedal. - `Expr. Pedals`: Resets the factory settings of the expression pedals. - `Memory default`: Clears the entire capture memory. - `MIDI default`: Resets the factory settings of the MIDI stops. - `Orchestrals def.`: Resets the factory settings of the solo- and orchestral voices. - `Preset default`: Resets the factory settings of the pre-programmed memory locations. - `Reverb default`: Resets the factory settings of the reverb. The following reset procedure is only available if the organ is equipped with the optional Platinum Voice Package: - `Spec. Stop def.`: Resets the factory settings of some special settings for some orchestral voices.	
5.	Press the ENTER piston. A question to confirm appears on the display.	Crescendo def. No/Yes
6.	Use the - and + pistons to select `No` or `Yes`. Press the ENTER piston to confirm and to return to the Reset Procedures menu.	Reset Procedures Crescendo def.
7.	Press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

5.12 Reverb Settings

The Classic 250 and 350 are standardly equipped with the Adaptive Surround Reverb ASR-12™ system. With this system it is possible to choose a matching reverb for each intonation style and variation. The length of the reverb can be changed and a 3D Surround effect can be enabled.

a. ASR-12™ *(standard))*	
1. Use the intonation style and variation pistons to activate an intonation style or variation of which the reverberation needs to be changed.	
2. Press the MENU piston.	Johannus Menu: Crescendo
3. Use the - and + pistons to select the `Reverb Settings` function on the display.	Johannus Menu: Reverb Settings
4. Press the ENTER piston. The first function of the Reverb Settings appears on the display.	Reverb Settings Rev. Program
5. Use the - and + pistons to select the desired reverb function which has to be changed. The following functions are available: `Reverb Program`, `Reverb Length` and `Reverb 3D Surround`.	Reverb Settings Rev. 3D Surround
6. Press the ENTER piston to confirm. The activated intonation style or variation appears on the first line of the display. The setting of the selected reverb function appears on the second line of the display.	Romantic 3D Surround: On
7. Use the - and + pistons to change the setting of the selected reverb function.	
8. Press the ENTER piston to confirm and to return to the Reverb Settings menu.	Reverb Settings Rev. 3D Surround
9. Press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

If the Classic 250 or 350 is equipped with the optional Reverb Package, the ASR-12™ system is replaced by the LIVEreverb™ system. This LIVEreverb™ system uses recordings of the acoustics of famous churches and concert halls to achieve a very realistic reverb.

b. LIVEreverb™ *(optional)*	
1. Use the intonation style and variation pistons to activate an intonation style or variation of which the reverberation needs to be changed.	
2. Press the MENU piston.	Johannus Menu: Ambiance

3.	Use the - and + pistons to select the `Reverb Settings` function on the display.	Johannus Menu: Reverb Settings
4.	Press the ENTER piston. The display shows the currently set church or concert hall, followed by the length of the reverb.	Bovenkerk Kampen 7.5s
5.	Use the - and + pistons to select the desired church or concert hall.	
6.	Press the ENTER piston to confirm and to return to the Johannus Menu.	Johannus Menu: Reverb Settings
7.	Press the MENU piston to exit the Johannus Menu.	Am:Center Mem: 1 Tr: 0/440 Cr: 0

5.13 Startup Settings

The Startup Settings can be used to select the startup defaults for the following functions:

a. Chorus On/Off
b. Default Intonation
c. Headphones / Aux volume
d. Side Speakers volume
e. Special Stops (settings for special orchestral voices)

a. Chorus On/Off	
Startup Setting Chorus On/Off determines whether the Chorus function is switched on at startup of the organ.	
1. Press the MENU piston.	Johannus Menu: Crescendo
2. Use the - and + pistons to select the `Startup Settings` function on the display.	Johannus Menu: Startup Settings
3. Press the ENTER piston. The first item of the Startup Settings appears on the display: `Chorus On/Off`.	Startup Settings Chorus On/Off
4. Press the ENTER piston. The current setting appears on the display. The default setting is `On`.	Chorus On/Off (default) On
5. Use the - and + pistons to select the desired setting, for example `Off`.	Chorus On/Off Off
6. Press the ENTER piston to confirm and to return to the Startup Settings menu.	Startup Settings Chorus On/Off
7. Press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

b. Default Intonation	
Startup Setting Default Intonation determines which intonation style is selected at startup of the organ.	
1. Press the MENU piston.	Johannus Menu: Crescendo
2. Use the - and + pistons to select the `Startup Settings` function on the display.	Johannus Menu: Startup Settings
3. Press the ENTER piston. The first item of the Startup Settings appears on the display.	Startup Settings Chorus On/Off
4. Use the - and + pistons to select the `Default Into.` function.	Startup Settings Default Into.
5. Press the ENTER piston. The current setting appears on the display.	Default Into. Romantic
6. Use the - and + pistons to select the desired intonation style, for example `Symphonic`.	Default Into. Symphonic
7. Press the ENTER piston to confirm and to return to the Startup Settings menu.	Startup Settings Default Into.
8. Press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

c. Headphone / Aux	
Startup Setting Headphone / Aux determines the volume level of the headphone / Aux-output at startup of the organ.	
1. Press the MENU piston.	Johannus Menu: Crescendo
2. Use the - and + pistons to select the `Startup Settings` function on the display.	Johannus Menu: Startup Settings
3. Press the ENTER piston. The first item of the Startup Settings appears on the display.	Startup Settings Chorus On/Off
4. Use the - and + pistons to select the `Headphone / Aux.` function.	Startup Settings Headphone / Aux
5. Press the ENTER piston. The current setting appears on the display.	Headphone / Aux Level: 25

6. Use the - and + pistons to select the desired level, for example `20`.	Headphone / Aux Level: 20
7. Press the ENTER piston to confirm and to return to the Startup Settings menu.	Startup Settings Headphone / Aux
8. Press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

d. Side Speakers

Startup Setting Side Speakers determines the volume level of the Surround Loudspeakers at startup of the organ.

1. Press the MENU piston.	Johannus Menu: Crescendo
2. Use the - and + pistons to select the `Startup Settings` function on the display.	Johannus Menu: Startup Settings
3. Press the ENTER piston. The first item of the Startup Settings appears on the display.	Startup Settings Chorus On/Off
4. Use the - and + pistons to select the `Side Speakers` function on the display.	Johannus Menu: Side Speakers
5. Press the ENTER piston. The actual settings for the left and the right side speaker appear on the display.	>Level left: 30 Level right: 30
6. Use the - and + pistons to select side the level has to be changed, for example the right side.	Level left: 30 >Level right: 30
7. Press the ENTER piston. The pointer jumps to the set level.	Level left: 30 Level right:>30
8. Use the - and + pistons to select the desired level, for example `25`.	Level left: 30 Level right:>25
9. Press the ENTER piston to confirm and to return to the Side Speakers menu.	Level left: 30 >Level right: 25

For a proper balance of the Surround sound it is advisable to keep both sides on an equal level. Only use unequal levels to correct different volumes caused by, for example, reflective surfaces on one side of the organ.

10. Press the MENU piston three times to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

e. Special Stops

This function is only available if the organ is equipped with the optional Platinum Voice Package.

Startup Setting Special Stops determines special settings which are used for Harp, Harpsichord and Piano.
Firstly can be determined whether the Special Stops function has to be enabled.
After enabling the following functions are to set:

- Reverb Program
- Reverb Length *(ASR-12™ reverb only)*
- Reverb Volume
- Reverb 3D Surround effect *(ASR-12™ reverb only)*

1. Press the MENU piston.	Johannus Menu: Crescendo
2. Use the - and + pistons to select the `Startup Settings` function on the display.	Johannus Menu: Startup Settings
3. Press the ENTER piston. The first item of the Startup Settings appears on the display.	Startup Settings Chorus On/Off
4. Use the - and + pistons to select the `Special Stops` function on the display.	Johannus Menu: Special Stops
5. Press the ENTER piston. The possibility to enable or disable the Special Stops function appears on the display. Go to step 6 if the function has to be enabled. Go to step 12 if the function has to be disabled.	
6. Use the - and + pistons to select `Enabled` to enable the function.	Special Stops Enabled (def.)
7. Press the ENTER piston. The first item of the Special Settings function appears on the display.	Spec. Settings Rev. Program
8. Use the - and + pistons to select the item the setting that has to be changed, for example Reverb Volume.	Spec. Settings Rev. Volume
9. Press the ENTER piston. The current setting appears on the display.	Rev. Volume Volume: 6
10. Use the - and + pistons to select the desired setting. Press the ENTER piston to confirm and to return to the Special Settings menu.	Spec. Settings Rev. Volume

11. Press the MENU piston twice to return to the Startup Settings menu. Go to step 14.	Startup Settings Chorus On/Off
12. Use the - and + pistons to select `Disabled` to disable the Special Stops function.	Special Stops Disabled
13. Press the ENTER piston to confirm and to return to the Startup Settings menu.	Startup Settings Chorus On/Off
14. Press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

5.14 Temperaments

The Temperaments function sets the temperament.
There are eleven different temperaments:

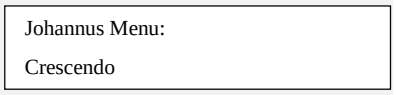
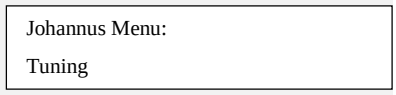
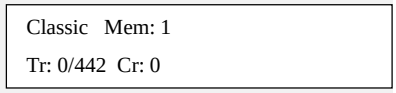
- Equal (normal temperament)
- Young II
- Vallotti
- Kirnberger III
- Kirnberger II
- Neidhardt III
- Werckmeister III
- 1/6 Meantone (1/6 comma meantone)
- 1/5 Meantone (1/5 comma meantone)
- 1/4 Meantone (1/4 comma meantone)
- Pythagorean

1. Press the MENU piston.	Johannus Menu: Crescendo
2. Use the - and + pistons to select the `Temperaments` function on the display.	Johannus Menu: Temperaments
3. Press the ENTER piston. The actual temperament appears on the display.	Temperaments Equal
4. Use the - and + pistons to select the desired temperament, for example `Kirnberger III`.	Temperaments Kirnberger III
5. Press the MENU piston twice to exit the Johannus Menu.	Classic Mem: 1 Tr: 0/440 Cr: 0

This setting cannot be saved. When the organ is switched off and on again, it is set to Equal automatically.

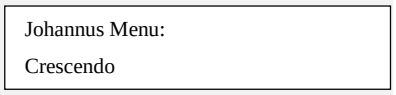
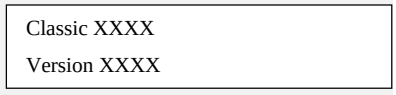
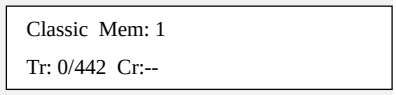
5.15 Tuning

The Tuning function shifts the pitch in steps of 1 Hz from 426 Hz to 454 Hz (standard pitch is a = 440 Hz). The set pitch can be read on the display directly behind the transposer setting.

1.	Press the MENU piston.	
2.	Use the - and + pistons to select the `Tuning` function on the display.	
3.	Press the ENTER piston. The current Tuning setting appears on the display.	
4.	Use the - and + pistons to select the desired tuning, for example `442 Hz`.	
5.	Press the ENTER piston to program the new setting and to return to the Johannus Menu.	
6.	Press the MENU piston to exit the Johannus Menu.	

5.16 Version

The Version function shows the version number of the software of the organ.

1.	Press the MENU piston.	
2.	Use the - and + pistons to select the function `Version` on the display.	
3.	Press the ENTER piston. The data of the software of the organ appears on the display.	
4.	Press the MENU piston twice to exit the Johannus Menu.	

6 VOICE PACKAGE

The Classic 250 and 350 are standardly equipped with the next four solo and orchestral voices:

- Panflute
- Trumpet
- Oboe
- String ensemble

Solo and orchestral voices are standard playable from a factory defined manual. This can be changed by the user via Quick Access (§4.12.2 Keyboard assignment Orchestrals) and via the Johannus Menu (§ 5.10 Orchestrals).

6.1 Platinum Voice Package

The Platinum Voice Package consists of the standard solo and orchestral voices plus the following solo and orchestral voices:

- Chimes
- Flute
- Tuba
- Clarinet
- Harp
- Harpsichord
- Piano I
- Piano extended *(Classic 350 only)*
- Gospel Organ I ('full organ' sound, with Leslie effect)
- Gospel Organ II ('jazz organ' sound, with Leslie effect)

6.2 Characteristics per voice

Explanation of used terminology:
- The compass of the solo or orchestral voices is indicated as follows:

First octave organ manual:	bass octave	C - B
Second octave organ manual:	tenor octave	c - b
Third octave organ manual:	middle octave	c' - b'
Fourth octave organ manual:	treble octave	c'' - b''
Fifth octave organ manual:	top octave	c''' - b'''
Highest c (sixth octave):		c''''

- Velocity behavior: the way the characteristics of a solo- or orchestral voice differs by different key velocities.

Different velocity behavior is only audible when the operation of the manual keys is set to 'Automatic' or 'Velocity'. If the operation of the manual keys is set to 'High' or 'Low' the solo or orchestral voice sounds always with an average sound and volume. See § 5.7 Keyboard Config for setting the operation of the manual keys.

Panflute		
Compass:	g - c’’’’	
Use with couplers:	normal	
Velocity behavior:	soft touch:	- low volume - mellow sound
	strong touch:	- strong volume - bright sound
Details:	---	

Trumpet		
Compass:	c - c’’’’	
Use with couplers:	normal	
Velocity behavior:	soft touch:	- low volume - mellow sound
	strong touch:	- strong volume - bright sound
Details:	---	

Oboe		
Compass:	c - c’’’’	
Use with couplers:	normal	
Velocity behavior:	soft touch:	- low volume - mellow sound
	strong touch:	- strong volume - bright sound
Details:	---	

String ensemble		
Compass:	C - c’’’’	
Use with couplers:	- manual tone is coupled to the pedal - an extra 16’ Contra Bass is added on the pedal	
Velocity behavior:	soft touch:	- low volume - mellow sound - mild chiff
	strong touch:	- strong volume - bright sound - more chiff
Details:	- fourfold - sound divided over organ and surround loudspeakers	

Chimes		
Compass:	c - c’’’	
Use with couplers:	normal	
Velocity behavior:	soft touch:	- low volume - mellow sound
	strong touch:	- strong volume - bright sound
Details:	---	

Flute		
Compass:	c - c’’’’	
Use with couplers:	normal	
Velocity behavior:	soft touch:	- low volume - mellow sound - long delay for vibration - less chiff
	strong touch:	- strong volume - bright sound - short delay for vibration - more chiff
Details:	---	

Tuba		
Compass:	C - f’’’	
Use with couplers:	normal	
Velocity behavior:	soft touch:	- low volume - mellow sound
	strong touch:	- strong volume - bright sound
Details:	---	

Clarinet		
Compass:	C - c’’’’	
Use with couplers:	normal	
Velocity behavior:	soft touch:	- low volume - mellow sound
	strong touch:	- strong volume - bright sound
Details:	---	

Harp		
Compass:	C - c’’’’	
Use with couplers:	normal	
Velocity behavior:	soft touch:	- low volume - thin sound
	strong touch:	- strong volume - strong sound
Details:	Special Stops:	When using the harp, special settings for reverb are enabled. See § 5.13 Startup Settings, sub e: Special Stops.
	Damper pedal:	Harp tones naturaly rings through a long time. A harpist will regularly damp the strings with his hands to keep a transparant sound. To make this possible on the organ, the f# key on the pedal board can be used as a damper pedal. The underlying f key can be used as a rest for the heel of the foot. The keys C - e of the pedal board remain their normal organ function. The switch to damper pedal will be indicated shortly on the display when the harp is activated.

Harpsichord		
Compass:	C - c’’’’	
Use with couplers:	normal	
Velocity behavior:	---	
Details:	Special Stops:	When using the harpsichord, special settings for reverb are enabled. See § 5.13 Startup Settings, sub e: Special Stops.

Piano I		
Compass:	C - c’’’’	
Use with couplers:	normal	
Velocity behavior:	soft touch:	- low volume - mellow sound
	strong touch:	- strong volume - bright sound
Details:	Special Stops:	When using the piano, special settings for reverb are enabled. See § 5.13 Startup Settings, sub e: Special Stops.
	Sustain pedal:	An essential part of playing the piano is the use of the sustain pedal. To make this possible on the organ, the f# key on the pedal board can be used as a sustain pedal. The underlying f key can be used as a rest for the heel of the foot. The keys C - e of the pedal board remain their normal organ function. The switch to sustain pedal will be indicated shortly on the display when the piano is activated.

Piano Extended *(Classic 350 only)*		
Compass:	‘C - c’’’’’	
Use with couplers:	---	
Velocity behavior:	soft touch:	- low volume - mellow sound
	strong touch:	- strong volume - bright sound
Details:	Compass:	The Piano Extended has a compass of 85 keys, divided over 3 keyboards. The middle keyboard sound at normal pitch. The lower keyboard sounds one octave lower. The upper keyboard sounds one octave higher. In this way it is possible to play the full compass of a piano keyboard.
	Special Stops:	When using the piano, special settings for reverb are enabled. See § 5.13 Startup Settings, sub e: Special Stops.
	Sustain pedal:	An essential part of playing the piano is the use of the sustain pedal. To make this possible on the organ, the f# key on the pedal board can be used as a sustain pedal. The underlying f key can be used as a rest for the heel of the foot. The keys C - e of the pedal board remain their normal organ function. The switch to sustain pedal will be indicated shortly on the display when the piano is activated.

Gospel Organ I		
Compass:	C - c’’’’	
Use with couplers:	- Coupling to another manual is not possible - Coupling to the pedal activates a special Gospel Organ Pedal sound on the pedal. The manual sound of the Gospel Organ is not coupled to the pedal.	
Velocity behavior:	---	
Details:	Sound:	‘ Full Organ’ sound
	Leslie:	The Gospel Organ sound is also caracteristic by the tremolo effect of the Leslie box. This effect has two modes: slow and fast. If the Leslie piston is not activated, the Gospel Organ sounds with a slow tremolo effect. By pressing the Leslie piston, the tremolo effect will be passed to the fast mode. **Note:** if no Gospel Organ piston is activated, the Leslie piston can not be activated either.

Gospel Organ II		
Compass:	C - c’’’’	
Use with couplers:	- Coupling to another manual is not possible - Coupling to the pedal activates a special Gospel Organ Pedal sound on the pedal. The manual sound of the Gospel Organ is not coupled to the pedal.	
Velocity behavior:	---	
Details:	Sound:	‘ Jazz Organ’ sound with percussion
	Leslie:	The Gospel Organ sound is also caracteristic by the tremolo effect of the Leslie box. This effect has two modes: slow and fast. If the Leslie piston is not activated, the Gospel Organ sounds with a slow tremolo effect. By pressing the Leslie piston, the tremolo effect will be passed to the fast mode. **Note:** if no Gospel Organ piston is activated, the Leslie piston can not be activated either.

6.3 Exclusions

A number of orchestral voices cannot be played simultaneously:

- Harp, Piano I and Piano Extended cannot be played simultaneously.
- Gospel Organ I and Gospel Organ II cannot be played simultaneously.

If one of these orchestral voices is activated, the corresponding orchestral voice(s) will be disabled automatically.

7 MAINTENANCE, TROUBLESHOOTING AND WARRANTY

7.1 Maintenance

Overview

Component	Maintenance	Frequency
Cabinet	Cleaning. See § 7.1.1	As required
Manuals	Cleaning and removing scratches. See § 7.1.2	As required

7.1.1 Maintenance of the cabinet

Do not use furniture polish or teak oil to clean the organ cabinet.
Direct sunlight may discolor the organ cabinet.

1. Clean the cabinet with a damp cloth.
2. Rub the cabinet dry with a lint-free cloth.

7.1.2 Maintenance of the manuals

The manuals are plastic in the standard version.

Do not use aggressive cleaning agents such as paint thinner or acetone to remove dirt.

1. Clean the manuals with a damp cloth.
2. Rub the manuals dry with a lint-free cloth.
3. Remove any scratches with car polish.

7.2 Problems

Overview

Symptom	Cause	Solution
Pedal board does not work properly	The pedal magnet is making poor contact with the magnetic switch at the rear of the pedal front cover.	Reposition the pedal board. See § 2.1
Organ functions do not work properly	The organ is not grounded.	Connect the organ to a grounded power socket.

7.3 Warranty

The conditions are specified in the warranty certificate. The warranty is void if changes or repairs are made to the organ by persons or organizations that are not authorized by Johannus Orgelbouw B.V.

8 MIDI IMPLEMENTATIONS

8.1 MIDI Implementation Chart

JOHANNUS Organs — Date: September 2008

MIDI Implementation card — Version 1.00

Functions		**Transmitted**	**Recognized**	**Remarks**
Basic Channel	Default Changes	See MIDI Specs See MIDI Specs	See MIDI Specs Y[1]	See MIDI Specs
Mode	Default Messages Altered	Mode 3 N * * * * * * * *	Mode 3 N N	
Note Number	True Voice	36 - 96 * * * * * * * *		
Velocity	Note ON Note OFF	9nH v=1 - 127 9nH (v=64) 9nH (v=0)	9nH v=1 - 127 9nH v=1 - 127 9nH v=0, 8nH v=*	Velocity ON Velocity OFF *=irrelevant
After Touch	Keys Channels	N N		
Pitch Bend		N		
Control Change	7 11 100/101/6 100/101/6	Y Y Y Y		General Volume Expr. pedals Pitch Transposer
Program Change	: True#	See MIDI Specs * * * * * * * *	See MIDI Specs See MIDI Specs	See MIDI Specs See MIDI Specs
System Exclusive		See MIDI Specs	See MIDI Specs	See MIDI Specs
Common	: Song Pos : Song Sel : Tune	N N N	N N N	
System Real Time	: Clock : Commands	N N	N N	
Aux	: Reset All Contr. : Local ON/OFF : All Notes OFF : Active Sense : Reset	N N Y N N	N N Y N N	
Notes		[1] Depends on number of divisions		

Mode 1: OMNY ON, POLY
Mode 2: OMNY ON, MONO
Mode 3: OMNY OFF, POLY
Mode 4: OMNY OFF, MONO

Y=YES
N=NO

8.2 MIDI Specifications

This paragraph describes the specifications on the MIDI Implementation Chart in more detail.

Default basic channels (transmitted/recognized)

Classic 250:	1:	Great	Classic 350:	1: Choir
	2:	Swell		2: Great
	3:	Pedal		3: Swell
	12:	Stops		4: Pedal
				12: Stops

Basic channel changes (transmitted)
Can be programmed through the MIDI Config. See § 5.9 MIDI Config.

Control changes (transmitted)

- Controller 7 (07h) — General volume, with volume values 40 (28h) – 127 (7Fh).
- Controller 11 (0Bh) — Swell pedal, with volume values 55 (37h) - 127 (7Fh).
- Controller 6 (06h) — Pitch, with pitch values (21h) - 95 (5Fh).
  Pitch value 64 (40h) = A = 440Hz.
  The following applies to the pitch:
  LSB 100 (64h) 1 (01h) and the MSB 101 (65h) 0(00h).
  Transposer, with transposer values 56 (38h) - 72 (48h).
  Transposer value 64 (40h) = A = 440Hz.
  The following applies to the transposer:
  LSB 100 (64h) 2 (02H) and the MSB 101 (65h) 0(00h).

Control changes (recognized)

- Controller 7 (07h) — General volume, with volume values 0 (00h) - 127 (7Fh). Volume values less than 40 (28h) are treated as 40 (28h).
- Controller 11 (0Bh) — Swell pedal, with volume values 0 (00h) - 127 (7Fh). Volume values less than 55 (37h) are treated as 55 (37h).

Program changes (transmitted/recognized)
Organ stops: Depends on the number of stops and the sequence of stops.
MIDI stops (programmable): 1-128. See § 5.9 MIDI Config.

System exclusive messages (transmitted/recognized)
Each ‘sys ex’ (system exclusive) message largely looks the same. The first 7 bytes and the last byte are always the same. Only the value of the 8th byte varies. This is the ‘sys ex message’ that Johannus generally uses: F0 00 4A 4F 48 41 53 XX F7 (hexadecimal). The ‘sys ex messages’ described below only indicates the value of the 8th byte (XX) and the output from which it is transmitted.

All stops off
The ‘All stops off’ sys ex code is 7F. This sys ex code is transmitted through the MIDI SEQ. output when the 0 piston is pressed for a longer time. When an ‘All stops off’ sys ex code is received, all stops on the instrument are switched off.

Pushbutton values
When a piston is pressed, a sys ex code is transmitted with the value of the piston that is pressed (for example PP = 00 P = 01) through the MIDI MOD. output.
These sys ex codes are only important when the Johannus sound module CSM 128 is connected to your instrument.

Other MIDI codes (transmitted)
Press the 0-piston to transmit the sys ex code, 'All stops off' and all volume settings through the MIDI SEQ. output.